II. RESEARCH and PUBLICATIONS

A) Summary of recent research project.

Project 1

Title: Quality Management Initiative Support (1998)
Sponsor: Defense Information Systems Agency (DISA)

Funding level, '97-'98: \$300,000

Principal investigator: François Melese

Co-investigators: Commander Mark Murphy; Dr. Michael Stroup; Lt Col. Jon Czernacki Description of project: The contract was for DRMI to provide technical support to assist the

Defense Information Systems Agency (DISA) in an on-going Quality Management Initiative. A global web survey instrument was constructed to study measurable attributes of the Presidential Quality Award criteria.

A Metrics Development Framework (MDF) was developed that

combines key quality management models with economics and activity

based costing to assist public managers to evaluate and improve

organizations.

Release time: 1 to 2 days per week

Students participating: Captain Todd Calhoun, Major Michael Castagna, and Major Doug

Thiery

Other staff supported: Dr. Roger Evered (Systems Management), Dr. Cary Simon (Systems

Management), Dr. Lyn Whittaker (Operations Research).

Candidate's role: Principal investigator

Publications: Melese, F., "The Latest in Performance Budgeting: The

Government Performance and Results Act (GPRA)," Armed Forces

Comptroller, Spring 1999

Blandin, J., Melese, F., and S. O'Keefe, "A Framework for Improving Defense Decisions: Integrating Enterprise Resource Planning (ERP) with the Planning, Programming & Budgeting System (PPBS),"

Defense and Peace Economics, 2002 (forthcoming).

B) Books

1. Melese, F., The Optimal Management of Nonrenewable Energy Resources: Problems of Entry and Taxation, University of Louvain Press, 1982.

C) Sections in books.

- 2. Fanchon, P. and F. Melese, "Reaching A Steady State Cycle," Section 2.6 in Control Theory Methods in Economics by Jati K. Sengupta and Phillip Fanchon, Kluwer Academic Publishers, London, 1997 pp. 54-62.
- 3. Melese, F., J. Blandin, and P. Fanchon, "Military Pay," Section 6.3 in <u>The Economics of Defense</u>, (Hartley, K. & T. Sandler Eds.), 1995.
- 4. Ingham, A., D. Weiserbs, and F. Melese, "Unemployment Equilibria in an Open Economy Importing a Natural Resource" in Economic Theory and Natural Resources, (Eichorn Ed.), Physica-Verlag, Cambridge, Mass., 1982.

D) Refereed journal papers.

- 5. Blandin, J., Melese, F., and S. O'Keefe, "A Framework for Improving Defense Decisions: Integrating Enterprise Resource Planning (ERP) with the Planning, Programming & Budgeting System (PPBS)," <u>Defense and Peace Economics</u>, 2002 (forthcoming).
- 6. Palmore J. and F. Melese, "A Game Theory View of Preventitive Defense Against Ballistic Missile Attack," <u>Defense Analysis</u>, August 2001.
- 7. Melese, F., and J. Palmore, "Ballistic Missile Defense: Protection or Placebo?" Defense Analysis, 16/1, April 2000.
- 8. Melese, F., "Gain-Sharing, Success-Sharing and Cost-Based Transfer Pricing: A New Budgeting Approach for the Department of Defense," Military Operations Research, 3/1, 1997.
- 9. Melese, F., and P. Fanchon, "A Model of Periodic Job Training," (with P. Fanchon) International Advances in Economic Research, 2/4, 1996.
- 10. Fanchon, P., and F. Melese, "Strategies Salariales pour Attirer et Garder Certains Employes," Gestion des Resources Humaines [Human Resource Management], 1996.
- 11. Melese, F., D. Kaserman, and J. Mayo, "A Dynamic Model of Advertising by the Regulated Firm," Journal of Economics, 1996.
- 12. Melese, F., "Government-Mandated Benefits, Taxes and Wages," Southern Economic Journal, 62/1, 1995.
- 13. LaCivita, CJ., and F. Melese, "The Defense Industry Challenge," <u>Defence Analysis</u>, 1994.
- 14. Kaserman, D., and F. Melese, "Horizontal Mergers and the Balance of Trade," Managerial and Decision Economics, 1993.
- 15. Clark, D., D. Kaserman, and F. Melese, "Domestic Market Structure and International Trade in an Open Economy," Quarterly Review of Economics and Finance, 32/3, 1992.
- 16. Melese, F., J. Blandin, and P. Fanchon, "Benefits and Pay: The Economics of Military Compensation," <u>Defense Economics</u> (now <u>Defense and Peace</u> Economics), 3, 1992.
- 17. Melese, F., and Ph. Michel, "Reversing the Arms Race: A Differential Game Model," Southern Economic Journal, 57/4, 1991.
- 18. Melese, F., and Ph. Michel, "Uncertainty in Tax Reform: The Case of an Extractive Firm," <u>Journal of Environmental Economics and Management</u>, 21, 1991.
- 19. Melese, F., "Rethinking Military Medicine," <u>Defence Analysis</u>, 6/4, 1990.
- 20. Melese, F., J. Henderson, and W. Shughart, "Tit-for-Tat, Tariffs and Time: A Dynamic Model of Trade Policy," <u>International Trade Journal</u>, 4/2, 1990.
- 21. Im, B., D. Kaserman, and F. Melese, "Endogenous Regulation and the Firm's Regulatory Expenses," <u>Applied Economics</u>, 21/3, 1989.
- 22. Melese, F., and Ph. Michel, "The Hazard Rate and the Hotelling Rule," Atlantic Economic Journal, 16/4, 1988.
- 23. Melese, F., "A Quiet Revolution in the Soviet Union," <u>Defence Analysis</u>, 4/4, 1988.

- 24. Im, B., D. Kaserman, and F. Melese, "Rent Seeking and the Allowed Rate of Return: A Recursive Model," Review of Industrial Organization, 3/4, 1988.
- 25. Melese, F., and D. Kaserman, "Superconductors and the Future of Electric Utilities," Journal of Policy Analysis and Management, 7/1, 1987.
- 26. Melese, F., and W. Transue, "Unscrambling Chaos Through Thick and Thin: An Explanation," Quarterly Journal of Economics, Feb. 1987.
- 27. Melese, F., and W. Transue, "Unscrambling Chaos Through Thick and Thin," Quarterly Journal of Economics, 101, 1986.
- 28. Melese, F., and Ph. Michel, "Deregulation, Endogenous Expectations, and the Evolution of Industry Structure," Southern Economic Journal, 51/3, 1985.
- 29. Melese, F., and Ph. Michel, "Deregulation as a Switch of Regime: Price Effects Using a Modified Hotelling Rule," Energy Economics, 7/2, 1985.
- 30. Melese, F., "Deregulation as a Switch of Regime," <u>International Journal of Energy Systems</u>, 5/2, 1985.
- 31. Melese, F., "Cartel Extraction and Backstop Entry," Recherches Economiques de Louvain, 46/3, 1980.
- 32. Melese, F., "A Competitive Sector Depletion Allowance in the Context of an Intertemporal Dominant Firm Model," Recherches Economiques de Louvain, 45/2, 1979.
- E) Non-refereed journal papers. [reviewed by an editor and sometimes also by one or more referees]
 - 33. Melese, F., "Strategic Investments in Military Education: An Economic Perspective," PHALNX, June 2000.
 - 34. Melese, F., "The Latest in Performance Budgeting: The Government Performance and Results Act (GPRA)," <u>Armed Forces Comptroller</u>, Spring 1999.
 - 35. Melese, F., and D. Rose, "A User-Friendly Guide to Statistical Estimation," <u>Armed Forces Comptroller</u>, 43/1, Winter 1998.
 - 36. Melese, F., "Pile on Microsoft," The Free Market, 1998.
 - 37. Melese, F., J. Lowe, and M. Stroup, "Integrating Cost and Effectiveness: An Economic Perspective," PHALANX, September 1997.
 - 38. Bonsper, D., and F. Melese, "Cost Integration and Normalization Issues," PHALANX, Dec. 1996.
 - 39. Melese, F., and M. Stroup, "Gain-Sharing and Success-Sharing: A Proposal," <u>Armed Forces Comptroller</u>, 4, Spring, 1995. (Winner of the Armed Forces Comptroller's "Editorial Award.")
 - 40. Melese, F., "Performance Budgeting," The Free Market, 1995.
 - 41. Lowe, J., and F. Melese, "Down-Sizing and Budget-Cutting: Alternative Strategies," Navy Comptroller, 3/2, 1993.
 - 42. Melese, F., "Civil Rights Laws Eliminate Jobs," The Free Market, 11/3, 1993
 - 43. Melese, F., "The Relationship of Subsidies and Financial Benefits in Military Compensation," Military Outlook, (Journal published by the Czech M.O.D.), 4, 1993.

- 44. Blandin, J., and F. Melese, "Resources Productivity and Unit Cost," <u>Armed Forces Comptroller</u>, 14, 1991.
- 45. Melese, F., "Energy and the Free Market," American Scientist, 76/2, 1988.

F) Refereed conference papers.

46. Melese, F., "Optimal Cartel Policy with Stochastic Demand," Energy, Power and Environmental Systems, (Hamza Ed.), ACTA Press, Zurich, Switzerland, 71/4, 1985.

G) Book reviews.

- 45. "A Review of *The Economic Analysis of Mergers*," book review for Managerial and Decision Economics, 19, 1998.
- 46. "A Review of *Modern Managerial Economics*," book review for <u>Managerial and Decision Economics</u>, 15, 1994.

H) Other publications.

- 47. "Anti-Missile Shield Questioned," (with J. Palmore) <u>USA TODAY</u>, March 24, 1999.
- 48. "The Government Performance and Results Act (GPRA)," (Feature Article) Monterey Chapter Newsletter, American Society of Military Comptrollers, 1/3, January 1999.
- 49. "Some Good Advice for Jacques Chirac," The Wall Street Journal, July 5, 1995.
- 50. "Striking Grocery Workers Won Recent Battle, But May Have Lost The War," The Monterey Herald, April 1995.
- 51. "Monetary Rewards vs. Pats-on-the-Back," The Montery Herald, January 1995.
- 52. "You Get What You Pay For," The Monterey Herald, January 1995.
- 53. "Navy School Professor Proposes Strategy to Combat DUI," The Monterey Herald, January 1994.
- 54. "California Water: A Free Market to End the Waste," (with G. Moser) The Sacremento Bee, March 27, 1992.